

REMARKS

In response to the non-final Official Action of September 21, 2009, claims 1, 2, 10, 19, 27, 29 and 35 have been amended.

Claims 1, 2, 10 and 27 have been amended to recite sending a request to a mobile communication network to switch and thereafter continue transmitting multicast data via a point-to-point channel, in case said determined link quality lies below a given link quality. Support for this amendment can be found in the application as filed, including at page 9, lines 7-11.

Claims 19 and 29 have been amended to recite estimating a link quality of a point-to-multipoint channel while said transmitting portion transmits multicast data to a mobile station on a point-to-point channel. Support for this amendment can be found in claim 17, which has been allowed by the Office.

Claim 35 has been amended to recite “while said point-to-point channel is used by said network for transmitting multicast data to said mobile station.” Support for this amendment can be found in claim 16, which has been allowed by the Office.

Claim Rejections - 35 USC §103

At section 2, claims 1 and 2 are rejected under 35 USC §103(a) as unpatentable over newly cited US patent 6,529,740, Ganuscheau, in view of US patent 5,572,678, Homma, et al (hereinafter Homma).

With respect to claim 1, it is asserted that Ganuscheau teaches a method comprising the actions recited therein, but does not expressly call for “sending a request to said mobile communication network to transmit said multicast data via a point-to-point channel in case said determined link quality lies below a given link quality”. The Office asserts that Homma teaches sending a request to said mobile communication network to transmit said multicast data via a point-to-point channel in case said determined link quality lies below a given link quality.

Ganuscheau is directed to a group radio with subscriber-radio controlled channel selection. In particular, Ganuscheau is directed to a “point-to-multipoint (PTM) communication system (20) that includes a cellular radio infrastructure (22) having base stations (32) implemented in satellites (34) placed in low earth orbits (38). PTM subscriber radios (24) share common cellular radio infrastructure (22) multipoint

channels (52) to engage in a common PTM communication session while the cellular radio infrastructure (22) also conveys point-to-point communications. A group control computer (28) constructs a channel list (126) which is downloaded to PTM subscriber radios (24). The channel list (126) identifies multipoint channels (52) and indicates when and where the channels (52) are active. Without emitting transmissions to the cellular radio infrastructure (22), PTM subscriber radios (24) autonomously switch to new multipoint channels (52) in response to their current time and location and the channel list (126).” (Ganuscheau, Abstract and Figure 1)

It is therefore clear that in Ganuscheau, the switching is between point-to-multipoint channels, but is not switching from a multicast channel to a point-to-point channel as set forth in amended claim 1.

Homma is directed to a data communication method for transmitting a large amount of data via a network, such as a LAN to which a plurality of stations or terminals are connected, through a simplified processing procedure. The large amount of data is transmitted from a sender station to a plurality of receiver stations by utilizing a connectionless communication service while inter-station reception acknowledging/retransmitting processing are performed by using a connection-oriented communication service. The large amount of data to be transmitted is divided into a plurality of blocks, and inter-block delay time is set on the basis of station status factors, such as a permissible load increase rate of the CPU of the individual stations (Homma, Abstract). The Office specifically relies on column 5, line 34 through column 6, line 7 of Homma. As there indicated, Homma only discloses that a mobile station transmits a retransmission request in case of a drop-out of an information frame. For example, it is stated in that during multicast transmission, “there may occur drop-out or loss of the information frame due to a communication error because the multicast transmission is lacking of procedure, as mentioned previously. Upon occurrence of such drop-out of information frame, the corresponding information frame must be sent again.” Thus, if there is a drop-out or loss, the transmitting of the frame must start over, so that the frame can be sent again. It is therefore clear that Homma is directed to the idea that the original packet data are transmitted via a multicast channel and only retransmission of this original packet data is via a point-to-point channel.

As amended, claim 1 recites sending a request to a mobile communication network to switch and thereafter continue transmitting multicast data via a point-to-point

channel, in case said determined link quality lies below a given link quality. Because the claim states that transmission of multicast data is continued via a point-to-point channel, it is clear that the transmission of data is not being restarted, as in Homma.

Therefore, because the combination of Ganuscheau and Homma does not disclose or render obvious each feature of claim 1 as amended, it is respectfully submitted that amended claim 1 is not suggested by Ganuscheau further in view of Homma and is in allowable form.

Dependent claim 2 is believed to be allowable at least in view of its dependency from claim 1.

At section 3 of the Official Action, claims 5 and 6 are rejected under 35 USC §103(a) as unpatentable over Ganuscheau further in view of Homma further in view of US patent 6,360,076, Segura, et al. Claims 5 and 6 both ultimately depend from amended claim 1 and are believed to be allowable at least in view of such dependency.

Referring now to section 4 of the Official Action, claims 10, 12, 23, and 27 are rejected under 35 USC §103(a) as unpatentable over US patent application publication 2003/0220119, Terry (hereinafter Terry I), in view of Homma.

Although independent claim 10 is rejected using Terry I in place of Ganuscheau, Homma is applied in this rejection in the same manner as it is applied in the rejection of claim 1. Because claim 10 has been amended similarly to claim 1, it is respectfully submitted that for similar reasons as presented above with respect to claim 1, neither Homma nor Terry teaches this feature of claim 10.

It is therefore respectfully submitted that independent claim 10 as amended is distinguished over Terry I in view of Homma, and is in allowable form.

Independent apparatus claim 27 corresponds to independent claim 10, but written using means plus function terminology, and has been amended in a manner similar to claims 1 and 10. It is therefore also considered to be distinguished over Terry I in view of Homma and in allowable form.

Dependent claims 12 and 23 are also considered to be allowable at least in view of their dependency from claim 10.

At section 5, claim 35 is rejected under 35 USC §103(a) as unpatentable over Terry I further in view of US patent 6,810,236, Terry (hereinafter Terry II). However, independent apparatus claim 35 corresponds to independent method claim 16, which the Office states at section 15 of the Office Action is allowed because no prior art

references or combination of prior art references in combination disclose or suggest the combination of: “requesting and receiving from a mobile station measurement results for link quality related measurement on a point-to-point channel which point-to-point channel is currently used by said network for transmitting multicast data to said mobile station;” and “in case said estimated link quality of said point-to-multipoint channel reaches a required link quality, ordering said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data.” Claim 35 has been amended to recite “a communication component configured to request and receive from a mobile station measurement results for link quality related measurements on a point-to-point channel while said point-to-point channel is used by said network for transmitting multicast data to said mobile station,” and “a processing component configured to order said mobile station to switch from said point-to-point channel to said point-to-multipoint channel for receiving said multicast data in case said estimated link quality of said point-to-multipoint channel reaches a required link quality”(emphasis added). Therefore, because apparatus claim 35 has been amended to recite the same features as method claim 16, which the Office has allowed, Applicant respectfully submits that claim 35 as amended is in allowable form and is also not disclosed or suggested by any combination of the references.

At section 7, claims 13 and 22 are rejected under 103(a) as being unpatentable over Ganucheau, in view of Homma, further in view of Ramaswamy (U.S. Patent No.6,571,112). Because claim 13 is dependent on claim 1, which Applicant has shown to be in allowable form, and because claim 22 is dependent on claim 17, which the Office has stated is allowable, it is respectfully submitted that at least in view of this dependency, these dependent claims are in allowable form.

Claim Rejections - 35 USC §102

At section 6, claims 19-21, 25, and 29 are rejected under 35 USC §102(e) as anticipated by Terry I.

Applicant notes independent apparatus claims 19 and 29 correspond to independent method claim 17. At section 15 of the Office Action, claim 17 is allowed by the Office because no prior art references or combination of prior art references in combination disclose or suggest the combination of: “estimating a link quality of a point-to-multipoint channel while transmitting multicast data on a point-to-point channel to a

mobile station” and “receiving said multicast data by means of a switch order, which switch order releases said point-to-point connection and provides parameter for said point-to-multipoint channel to said mobile station.” Claim 19 has been amended to recite both “a processing portion configured for estimating a link quality of a point-to-multipoint channel while said transmitting portion transmits multicast data to a mobile station on a point-to-point channel” and “receiving said multicast data by means of a switch order,...wherein said switch order releases said point-to-point connection and provides parameters for said point-to-multipoint channel to said mobile station.” Claim 29 has been amended similarly. Thus, it is clear that allowed method claim 17 and independent claims 19 and 29 as amended all incorporate the same distinguishing features.

Therefore, because claims 19 and 29 as amended recite the same features as claim 17, which is allowable, it is respectfully submitted that claims 19 and 29 as amended are in allowable form and are neither disclosed nor suggested by any combination of the cited references.

Dependent claims 20, 21, and 25 are also believed to be allowable at least in view of their dependency to independent claim 19.

Claim Objections

At section 10, claims 12, 13, 20, 21, 22, 23, and 25 are objected to as being presented as a dependent claim, but the Office requests that they be written in independent form. Applicant respectfully disagrees.

Although it is not clear to Applicant how the Office is distinguishing between an “independent” and “dependent” claim in the present application, the distinction between “independent” and “dependent” claims has been clearly delineated.

35 U.S.C. 112, fourth paragraph states: “a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers” (emphasis added).

Furthermore, 37 CFR §1.75(c) states: “One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application” (emphasis added).

The Court of Appeals for the Federal Circuit has recently stated: “[t]o establish whether a claim is dependent upon another, this court examines if the new claim both refers to an earlier claim and further limits that referent.” *Mosnato Co. v. Syngenta Seeds, Inc.*, 503 F.1352, 1357 (Fed Cir. 2007) (emphasis added). The court went on to say, “[a] claim’s status as dependent or independent depends on the substance of the claim in light of the language of § 112, ¶ 4, and not the form alone.” *Id.* at 1357-58.

The U.S. Patent and Trademark Office has stated in § 608.01(n) that “[T]he test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim.” The MPEP goes on to set forth:

The fact that a dependent claim which is otherwise proper might relate to a separate invention which would require a separate search or be separately classified from the claim on which it depends would not render it an improper dependent claim, although it might result in a requirement for restriction.

The fact that the independent and dependent claims are in different statutory classes does not, in itself, render the latter improper. Thus, if claim 1 recites a specific product, a claim for the method of making the product of claim 1 in a particular manner would be a proper dependent claim since it could not be infringed without infringing claim 1. Similarly, if claim 1 recites a method of making a product, a claim for a product made by the method of claim 1 could be a proper dependent claim. On the other hand, if claim 1 recites a method of making a specified product, a claim to the product set forth in claim 1 would not be a proper dependent claim since it is conceivable that the product claim can be infringed without infringing the base method claim if the product can be made by a method other than that recited in the base method claim. Manual of Patent Examining Procedure, § 608.01(n) (emphasis added).

In view of the above cited sources, Applicant has interpreted the definition of “dependent claim” to require that a claim: 1) refer to an earlier claim, and 2) limit the referred to claim. It is clear that the objected to claims both refer to earlier claims and limit those claims. For example, claim 12 refers to claim 10 and limits the apparatus of claim 10 by requiring that it be part of a mobile communication system which also comprises a sub-network of a mobile communication network. Any system which would infringe claim 12 would also infringe claim 10, because it requires an apparatus

according to claim 10. This reasoning also applies to dependent claims 13, 20-23 and 25.

Therefore, because the objected to claims are proper dependent claims as defined by 35 U.S.C. 112, it is respectfully requested that the objections be withdrawn.

Objection to the Specification

The amendment to the specification filed on June 22, 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. Specifically, it is asserted that the material beginning on page 6, line 17 adding "processor readable medium" in order to store software code and on page 13, line 18, adding "processor readable medium" for storing software code are new matter. Applicant respectfully disagrees.

Applicant amended the specification to state that the software program product according to the invention, which is run on a processing component, is a processor readable medium. However, because the specification clearly stated that the software program product is "running in a processing component of a mobile station, e.g. in the processing portion of the above proposed mobile station," a person having ordinary skill in the art at the time of invention would understand that for it to be run on a processor, the software program product must be a processor readable medium. Similarly, Applicant amended the specification to recite that the processing portions of BSS 410 and mobile station 420 included processor readable medium for storing software code. For similar reasons, the person having ordinary skill in the art would also have known the processing portions included processor readable media without it being explicitly stated in the specification. Therefore, because the fact that a software program product is a processor readable medium would have been known to the person of ordinary skill in the art at the time of invention without it being explicitly stated in the specification, Applicant respectfully submits that this was not new matter introduced into the specification.

Claim Rejection- 35 U.S.C. 112

At section 13 of the Office Action, claims 13 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. It is asserted that the claims contain subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant respectfully disagrees.

Claims 13 and 22 are the processor readable medium claims. For the reasons provided under "Objections to the Specification" showing that the subject matter added to the specification by way of amendment was not new matter, but known at the time of invention to a person having ordinary skill in the art, it is respectfully submitted that claims 13 and 22 do not contain subject matter not described in the specification and are comply with the enablement requirement.

Objection to the Drawings

At section 14 of the Office Action, Replacement Figure 4 is objected to because it is asserted the applicant has added processor readable medium and prm which is new matter which applicant did not have support for in the original claims, original specification, or original drawings. For the reasons provided under "Objections to the Specification" showing that the subject matter added to the specification by way of amendment was not new matter, but known at the time of invention to a person having ordinary skill in the art, it is respectfully submitted that Figure 4 is supported by the specification and is in allowable form.

Allowable Subject Matter

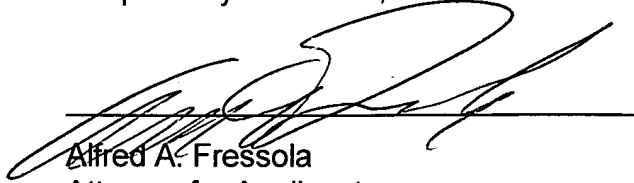
At section 15, it is stated that claims 16-18, 34 and 36 are allowed. It is further stated at section n16 that claims 3-4, 7-9, 18 & 30-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Respectfully submitted,

Dated: December 11, 2009

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', is written over a horizontal line.

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